## Fall 2019 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

#### Sacramento River Basin

RD1600	Overall LMA	Total LMA						
Reclamation District No. 1600 Mull	Rating	Miles						
	U	14.69						
Rated Item		Maintena	nce Deficiency		Enforc	cement	Design 8 Obsole	k System scence
Nated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee	1 000		2.00	4.000/		I	T	
Vegetation	0.63		0.63	4.29%				
Trim / Thin Trees	0.01		0.01	0.07%	0.44			
Encroachments	0.15		0.15	1.02%	0.11			
Animal Control	0.01	0.01	0.05	0.34%				
Slope Stability	0.02	0.06	0.26	1.77%				
Erosion / Bank Caving	0.05		0.05	0.34%				
Cracking	0.03		0.03	0.20%				
Supplemental 2017 USACE Erosion Survey	1.18		1.18	8.03%		I	l	
	1.10		1.10	6.03%	0.10	0.01		
DRAFT DWR UCIP Field Study 2017 Storm Damage	0.96		0.96	6.53%	0.10	0.01		
		0.07			0.04	0.04	0.00	0.00
LMA Totals:	3.04	0.07	3.32	22.60%	0.21	0.01	0.00	0.00
Unit No. 01 Sacramento River RB	Overall Unit Rating	Total Unit Miles						
RD1600	M	10.46						
		Maintena	nce Deficiency		Enforc	cement	Design & System Obsolescence	
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles			U Miles
Earthen Levee								
Vegetation	0.63		0.63	6.02%				
Trim / Thin Trees	0.01		0.01	0.10%				
Encroachments	0.14		0.14	1.34%	0.11			
Animal Control	0.01	0.01	0.05	0.48%				
Slope Stability	0.01		0.01	0.10%				
Erosion / Bank Caving	0.05		0.05	0.48%				
Supplemental						1		
2017 USACE Erosion Survey	1.18		1.18	11.28%				
DRAFT DWR UCIP Field Study					0.09	0.01		
Unit Totals:	2.03	0.01	2.07	19.79%	0.20	0.01	0.00	0.00
Unit No. 02 Yolo Bypass LB	Overall Unit Rating	Total Unit Miles						
RD1600	U	4.23						
TKB 1000			nce Deficiency					k System
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles		M Miles	
Earthen Levee	0.04		0.01	0.0404				
Encroachments	0.01	0.00	0.01	0.24%				
Slope Stability	0.01	0.06	0.25	5.91%				
Cracking	0.03		0.03	0.71%				
Supplemental  DRAFT DWR UCIP Field Study					0.01			
2017 Storm Damage	0.96		0.96	22.68%	0.01			
Unit Totals:	1.01	0.06	1.25	29.53%	0.01	0.00	0.00	0.00
Unit Totals.	1.01	0.00	1.20	23.0070	0.01	0.00	0.00	0.00

Winter \*\*

#### Flood Control Project Maintenance Levee Inspections

#### **LMA District Cover Sheet**

Fall 2019 Levee Inspection Results

## **Reclamation District No. 1600 Mull**

Spring

Summer \*\*

	(March - May)	(June - August)	(September - November)	(December - February)
† Overall LMA Rating (Fall Only)			U	
	** Non-receipt of Summ Reports may effect o	· · · · · · · · · · · · · · · · · · ·		
† SPRING INSPECTIONS: Overall maintenance deficiencies are rate	e ratings are not deterr d using the same crite			lual maintenance
FALL INSPECTIONS: The overall maintena within the attached u			ation and maintenance de tended to be an indiction o	
Comments				

#### **Unit Cover Sheet**

#### Fall 2019 Levee Inspection Results

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles
Unit No. 01 Sacramento F	River Right	10.46

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			М	
Date of Inspection	3/5/2019 - 3/7/2019		11/5/2019 - 11/5/2019	
DWR Inspector	Zach Jojola		Zach Jojola	
Accompanied By	Alberto De Leon			

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

## **Levee Inspection Report By Mile - Fall 2019**

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start		Rating **	Α	Issue No.		32		
LM End		Issue Type +	Ма	Location *	Location * N/A			
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Operations & Maintenance				0		0	
пеш	Manuals				0		0	
DWR ID DWR_RD1600_01_s _ 2013_32								
		Comn	nent Cod	de				
		Inspecto	or Comm	nent				
RD 1600 h	as copies	of the O&M m	nanuals.					

No Photos

Rating \*\* Issue No. Α LM Start 33 Location \* Issue Type + Ма N/A LM End Earthen Levee GPS Latitude/Longitude Category Start End Emergency Supplies & Item Equipment DWR\_RD1600\_01\_s \_ 2019\_33 DWR ID Comment Code

No Photos

Inspector Comment

RD 1600 maintains a stockpile of flood response material.

LM Start		Rating **	Α	Issue No.		34		
LM End		Issue Type +	Ма	Location *		N/A		
Catagori Earthen Levee			GPS La	atitud	e/Longitude			
Category				Start		End		
Item	Flood Pre	Flood Preparedness & Training			0		0	
item					0		0	
DWR ID	DWR_RD1	600_01_s _ 201	3_34					
		Comn	nent Cod	le				
	Inspector Comment							

RD 1600 has a written flood response plan and flood response training.

No Photos

\* Location

LS: Land Side WS: Water Side CR : Crown

N/A: Not Applicable

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

## Levee Inspection Report By Mile - Fall 2019

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	0.10	Rating **	М	Issue No.		129		
LM End	0.10	Issue Type +	En	Location *		WS		
0-1	evee	GPS La	atitud	e/Longitude				
Category				Start		End		
Item	Encroachi	ments		38.6764	67°	38.676467°		
пеш				-121.6312	17°	-121.631217°		
DWR ID DWR_RD1600_01_f _ 2013_129								
		Comn	nent Cod	de				
BU : Building								
		Inspecto	or Comm	nent				
Well pump house.								

LM Start

LM End

Photo 1 of 2: FA_2019_RD1600_191_129_20190829_00027.jpg	J
AND THE RESERVE TO TH	
The state of the s	

The small building is a pump house for the well. It services the house with water. Fall 2013

 0.10
 Rating \*\*
 M
 Issue No.
 129 (cont)

 0.10
 Issue Type +
 En
 Location \*
 WS

Photo 2 of 2: FA\_2019\_RD1600\_191\_129\_20190829\_00028.jpg



View of the building. Fall 2016.

0.11	Rating **	A/W	Issue No.		1			
0.11	Issue Type +	Ма	Location *		WS			
Earthen L	evee		GPS La	atitud	le/Longitude			
			Start		End			
Erosion / I	Bank Caving	38.6765	24°	38.676524	0			
			-121.631243 °		-121.631243	0		
DWR_RD1	600_01_f _ 201	8_1						
	Comn	nent Coc	le					
and monito	or erosion site							
		0	1					
	Inspecto	or Comm	ient					
Rills forming on overbuilt section of levee. Not within the prism. Recommend monitoring.								
	0.11 Earthen L Erosion / I DWR_RD1 and monito	0.11 Issue Type +  Earthen Levee  Erosion / Bank Caving  DWR_RD1600_01_f _ 2013  Command monitor erosion site.  Inspector	0.11 Issue Type + Ma  Earthen Levee  Erosion / Bank Caving  DWR_RD1600_01_f _ 2018_1  Comment Cocand monitor erosion site.  Inspector Comment g on overbuilt section of levee. I	0.11   Issue Type +   Ma   Location *	0.11 Issue Type + Ma Location *  Earthen Levee GPS Latitud Start  Erosion / Bank Caving 38.676524°  -121.631243°  DWR_RD1600_01_f _ 2018_1 Comment Code and monitor erosion site.  Inspector Comment ag on overbuilt section of levee. Not within the p	0.11         Issue Type +         Ma         Location *         WS           Earthen Levee         GPS Latitude/Longitude           Start         End           Erosion / Bank Caving         38.676524 ° 38.676524           -121.631243 ° -121.631243           DWR_RD1600_01_f _ 2018_1           Comment Code           and monitor erosion site.           Inspector Comment           ng on overbuilt section of levee. Not within the prism.		

## Levee Inspection Report By Mile - Fall 2019

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	0.11	Rating **	A/W	Issue No.		38
LM End	0.11	Issue Type +	Ma	Location *		LS
Category Earthen Levee				GPS La	atitud	e/Longitude
Category						End
Item	Slope Stability				24°	38.676524°
item				-121.631245 °		-121.631245°
DWR ID	DWR_RD1	600_01_f _ 201	8_38			
		Comn	nent Cod	de		
S3 : Repai access wh		slope damag le.	ed by ve	ehicle traffic	and	I prevent
Inspector Comment						
Vehicle ruts on the landside slope.						



View of ruts on the landside slope. Fall 2018.

LM Start	0.11	Rating **	A/W	Issue No.		49	
LM End	0.23	Issue Type +	Ob	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Vegetation				77°	38.678131°	
пеш	item					-121.632324°	
DWR ID	DWR_RD1	600_01_s _ 201	2_49				
		Comn	nent Cod	de			
V8 : Enviro	nmental F	Requirements.					
	Inspector Comment						

LM Start	0.11	Rating **	A/W	Issue No.	49 (cont)
LM End	0.23	Issue Type +	Ob	Location *	WS



Sign stating revegetation site. Spring 2016.

Photo 2 of 2: FA\_2019\_RD1600\_191\_49\_20190829\_00021.jpg



View of the revegetation site and fence on the waterward side of the levee looking upstream. Spring 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2019

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	0.13	Rating **	М	Issue No.		1203
LM End	0.13	Issue Type +	En	Location *		
Category	Supplemental					e/Longitude
Category	Category					End
Item	DRAFT D	DRAFT DWR UCIP Field				38.676802°
пеш	Study			-121.63144	2 °	-121.631442°
DWR ID	21459					·

#### Inspector Comment

Comment Code

DS\_ID:21459 FS\_ID:15087 EP\_NO: 1929

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Line should be located with carsonite signs on both

sides of levee.

FIELD\_STRUCT\_DESC: Telephone conduit of an unknown size or material through the levee, 3 feet below the crown. Telephone line at joint pole (JP) off the landside (LS) toe. (Permit No. 1929, 1954 - Pacific Telephone and Telegraph Company [PT&T]). [Additional Reference(s):

DWR Levee Log, 1988]. FS Date: 6/18/2013



Line visible on JP off LS toe. Likely this is the source of crossing.

LM Start	0.34	Rating **	М	Issue No.		27	
LM End	0.37	Issue Type +	Ma	Location *		WS	
Category Earthen Levee				GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	38.6795	90°	38.680014	0		
пеш				-121.6331	25°	-121.633341	0
DWR ID	DWR_RD1	600_01_f _ 201	9_27				

Comment Code

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

## Levee Inspection Report By Mile - Fall 2019

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	0.46	Rating **	A/W	Issue No.		42	
LM End	0.46	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Erosion / Bank Caving				38.6812	32°	38.681232	0
Item		-121.6337	57°	-121.633757	0		
DWR ID	DWR_RD1	600_01_f _ 201	8_42				
		Comn	nent Cod	de			
E1 : Note a	and monito	or erosion site					
	Inspector Comment						

No Photos

LM Start	0.52	Rating **	М	Issue No.		44	
LM End	0.52	Issue Type +	En	Location *	CR		
Category	evee	GPS La	titud	e/Longitude			
Category				Start		End	
Item	Encroachments				46°	38.682046°	
пеш					64 °	-121.634064°	
DWR ID DWR_RD1600_01_f _ 2018_44						·	
Comment Code							

PO : Pole

#### Inspector Comment

Telephone pole over the levee crown. Was unable to find permit.

LM Start	0.52	Rating **	M	Issue No.	44 (cont)
LM End	0.52	Issue Type +	En	Location *	CR

#### Photo 1 of 2: FA\_2019\_RD1600\_191\_44\_20190829\_00018.jpg



View of telephone line over levee crown. Fall 2018.

Photo 2 of 2: FA\_2019\_RD1600\_191\_44\_20190829\_00019.jpg



View of line running to pole on the other side of County Road 117. Fall 2018.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable A: Not Inspected/Rated M: Minimally Acceptable CR: Corrected U: Unacceptable A/W: Acceptable but Monitor & Maintain Enforcement

\* Issue Type

Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Fall 2019

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	0.53	Rating ** M		Issue No.		133		
LM End	0.53	Issue Type +	Ма	Location *		Ma Location *		LS
Category Earthen Levee			GPS Latitude/Longitude					
Calegory			Start		End			
Item	Slope Sta	bility		38.68214	40 °	38.682140°		
пеш			-121.63408	33 °	-121.634083 °			
DWR ID DWR_RD1600_01_f _ 2013_133								

## Comment Code

S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.

#### Inspector Comment

There appears to be a footpath and settlement on landside slope over pipe crossing.

LM Start	0.53	Rating **	М	Issue No.	133 (cont)
LM End	0.53	Issue Type +	Ma	Location *	LS

#### Photo 1 of 2: FA\_2019\_RD1600\_191\_133\_20191112\_00055.jpg



View of settlement and footpath on landside slope. Fall 2019.

#### Photo 2 of 2: FA\_2019\_RD1600\_191\_133\_20190829\_00029.jpg



View of the slope stability site. Fall 2016.

## Levee Inspection Report By Mile - Fall 2019

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	0.56	Rating **	A/W	Issue No.		24
LM End	0.66	Issue Type +	Ma	Location *		WS
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory						End
Item	2017 USA	CE Erosion S	Survey	38.68270	)7 °	38.684106 °
пеш				-121.63383	80°	-121.634219 °
DWR ID						

No Photos

Inspector Comment

Comment Code

2017 Site ID: SAC 71.3 R Status: Under Construction

2017 Field Notes: New erosion pocket and fresh toe erosion. Site is

currently under construction.

Site History: 2000 - Very cohesive vertical bank. 2003 - Some minor new erosion. 2006 - Some minor erosion in old pockets. 2009 -Minimal new erosion. 2011 - Multiple new erosion pockets and a few new tree popouts.

LM Start	0.69	Rating **	M	Issue No.	47			
LM End	0.72	Issue Type +	Ма	Location *	LS			
Category Earthen Levee			GPS Latitude/Longitude					
Calegory	ategory			Start		End		
Item	Vegetatio	n		38.68441	1°	38.684823°		
item			-121.63468	86 °	-121.634771 °			
DWR ID	DWR_RD1	600_01_f _ 201	8_47					
	Comment Code							

No Photos

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

CR : Crown

LS : Land Side N/A: Not Applicable WS: Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain

#### + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

## Levee Inspection Report By Mile - Fall 2019

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

1110	0.70	Rating **	N	Issue No.		604			
LM Start	0.78	Railing	IN	issue ivo.		624			
LM End	0.78	Issue Type +	Ma	Location *		WS			
Category	evee	GPS La	atitud	e/Longitude					
Calegory				Start		End			
Item	Trim / Thi	n Trees		38.6857	'13 °	38.685713°			
пеш				-121.6349	85°	-121.634985 °			
DWR ID DWR_RD1600_01_s _ 2017_624									
		Comn	nent Cod	de					
T5 : Tree s	stumps.								
		Inspecto	or Comm	nent					
Burnt stump on waterside slope.									



View of burnt tree on waterside slope. Fall 2016.

LM Start	0.88	Rating **	A/W	Issue No.	28			
LM End	0.88	Issue Type +	Ma	Location *	LS			
Category Earthen Levee			GPS Latitude/Longitude					
Calegory	Category			Start		End		
Itom	Erosion /	Bank Caving		38.6872	32°	38.687232 °		
пеш	Item		-121.6351	94°	-121.635194°			
DWR ID	DWR_RD1	600_01_f _ 201	9_28			·		
	Comment Code							

E1 : Note and monitor erosion site.

Inspector Comment

Minor runoff beginning to form. Recommend monitoring.

No Photos

LM Start	0.93	Rating **	A/W	Issue No.		29	
LM End	0.93	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	de/Longitude	
Calegory			Start		End		
Item	Erosion /	38.6878	27°	38.687827	0		
пеш				-121.6353	31 °	-121.635331	0
DWR ID	DWR_RD1	600_01_f _ 201	9_29				
		Comn	nent Cod	de			
E1 : Note	and monito	or erosion site					

Inspector Comment

Minor runoff beginning to form. Recommend monitoring.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected AW : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	0.94	Rating **	М	Issue No.		1204	
LM End	0.94	Issue Type +	En	Location *			
Supplemental				GPS Latitude/Longitude			
Category	Start				End		
Item	DRAFT D	WR UCIP Fie	ld	38.68803	80°	38.688030°	
пеш	Study			-121.63536	67°	-121.635367°	
DWR ID 21463							
	Comment Code						

## Inspector Comment

DS\_ID:21463 FS\_ID:15285 EP\_NO: 6100

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Gate valve will not open or close.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation pipe through the levee, 3.4 feet below the crown. Slant pump and gate valve on the waterside (WS) slope. Siphon breaker in a 12-inch steel riser on the landside (LS) shoulder. Filter, booster pump, and butterfly valve on the LS toe. 2.25-inch galvanized iron electrical conduit at the same location. (Permit No. 6100, 1968 - Charles Plumb Jr., replaced 8-inch pipe at same location). [Additional Reference(s): DWR Levee Log, 1988].

FS Date: 6/18/2013

LM Start	0.94	Rating **	М	Issue No.	1204 (cont)
LM End	0.94	Issue Type +	En	Location *	



Siphon breaker in steel riser on LS shoulder and concrete standpipe off LS toe.

#### Photo 2 of 3: UCIP\_FA\_2019\_15285\_25087.jpg



Pump and gate valve on WS slope.

## Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	0.94	Rating **	М	Issue No.	•	1204 (cont)	
LM End	0.94	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	titud	le/Longitude	
Calegory				Start		End	
Item		WR UCIP Fie	ld	38.68803	0°	38.688030	٥
пеш	Study			-121.63536	7°	-121.635367	٥
DWR ID	21463						

#### Comment Code

#### Inspector Comment

DS\_ID:21463 FS\_ID:15285 EP\_NO: 6100

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Gate valve will not open or close.

FIELD\_STRUCT\_DESC: 12-inch steel irrigation pipe through the levee, 3.4 feet below the crown. Slant pump and gate valve on the waterside (WS) slope. Siphon breaker in a 12-inch steel riser on the landside (LS) shoulder. Filter, booster pump, and butterfly valve on the LS toe. 2.25-inch galvanized iron electrical conduit at the same location. (Permit No. 6100, 1968 - Charles Plumb Jr., replaced 8-inch pipe at same location).

[Additional Reference(s): DWR Levee Log, 1988].

FS Date: 6/18/2013



Filters, boost pump, and gate valve down stream from concrete standpipe off LS toe.

LM Start	0.97	Rating **	A/W	Issue No.		134			
LM End	0.97	Issue Type +	Ma	Location *	LS				
Category Earthen Levee				GPS Latitude/Longitude					
Calegory				Start		Start		End	
Item	Erosion / I	Bank Caving		38.6884	54°	38.688454	0		
item				-121.6355	28°	-121.635528	0		
DWR ID	DWR_RD1	600_01_f _ 201	3_134						
		Comn	nent Cod	le					

E1: Note and monitor erosion site.

#### Inspector Comment

Runoff on the landside slope. Recommend monitoring.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### **Levee Inspection Report By Mile - Fall 2019**

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	1.01	Rating **	A/W	Issue No.		22	
LM End	1.10	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.6890	92°	38.690368°	
пеш				-121.6356	16°	-121.635669°	
DWR ID DWR_RD1600_01_f _ 2017_22							
		Comn	nent Cod	de			
V8 : Envir	onmental F	Requirements.					
		Inspect	or Comm	nent			

hoto 1 of 2 : FA_201	9_RD1600_191	_22_20190829_00	J11.jp
		<b>2</b>	
	1		G
and a			
		03/24/2016	

View of the revegetation site at the berm edge on the waterward side of the levee looking upstream. Spring 2016.

 LM Start
 1.01
 Rating \*\*
 A/W
 Issue No.
 22 (cont)

 LM End
 1.10
 Issue Type +
 Ma
 Location \*
 WS

Photo 2 of 2: FA\_2019\_RD1600\_191\_22\_20190829\_00012.jpg



Sign stating revegetation site. Spring 2016.

1.10					40		
	Issue Type +	Ма	Location *		LS		
Earthen Le	evee		GPS La	atitud	e/Longitude		
			Start		End		
Erosion / E	Bank Caving		38.6903	93°	38.690393°		
			-121.6356	88 °	-121.635688°		
OWR_RD16	600_01_f _ 201	9_40					
	Comn	nent Coc	le				
ule repair	of erosion site	e prior to	the next in	spec	ction.		
	Inspecto	or Comm	ent				
on the la	andside slope	caused	by goats.				
ַ	Erosion / E	Erosion / Bank Caving  OWR_RD1600_01_f _ 201:  Commule repair of erosion site  Inspecto	Erosion / Bank Caving  OWR_RD1600_01_f _ 2019_40  Comment Cocults repair of erosion site prior to	Start  Frosion / Bank Caving 38.6903 -121.6356  OWR_RD1600_01_f _ 2019_40  Comment Code	Start  Frosion / Bank Caving  38.690393° -121.635688°  WR_RD1600_01_f _ 2019_40  Comment Code  Ille repair of erosion site prior to the next inspector Comment		



View of bank caving on the landside slope. Fall 2019.

\*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable CR: Corrected U: Unacceptable A/W: Acceptable but Monitor & Maintain Enforcement

\* Issue Type

Ma: Maintenance Deficiency
Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Fall 2019

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	1.40	Rating **	М	Issue No.		4
LM End	1.40	Issue Type +	Ма	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Erosion / I	Bank Caving		38.6944	52°	38.694452°
пеш				-121.6342	92°	-121.634292 °
DWR ID	DWR_RD1	600_01_s _ 201	7_4			
		Comn	nent Cod	de		
E2 : Scheo	lule repair	of erosion site	e prior to	the next in	spe	ction.
		Inspecto	or Comm	nent		
Erosion wh	nere tire ru	ts previously	were forr	med.		

LM Start	1.40	Rating **	М	Issue No.	4 (cont)
I M End	1 40	Issue Type +	Ma	Location *	LS



View of erosion on the landside slope. Fall 2019.

#### Photo 2 of 2: FA\_2019\_RD1600\_191\_4\_20190829\_00001.jpg



View of the slope stability caused by vehicles on the landward side of the levee looking upstream. Fall 2015.

LM Start	1.40	Rating **	A/W	Issue No.		5	
LM End	1.40	Issue Type +	Ob	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Category			Start		End		
Vegetation			38.6944	69°	38.694469°		
пеш				-121.634312 °		° -121.634312°	
DWR ID	ID DWR_RD1600_01_f _ 2012_5						
		Comn	nent Cod	de			
V8 : Enviro	onmental F	Requirements.					
			_				
		Inspecto	or Comm	nent			

## Photo 1 of 2 : FA\_2019\_RD1600\_191\_5\_20190829\_00002.jpg



View of the revegetation site on the berm of the waterward side of the levee looking upstream. Spring 2016.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### **Levee Inspection Report By Mile - Fall 2019**

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

	4.40	Rating **	A/W	Issue No.		F (t)		
LM Start	1.40	Rating	A/VV	issue ivo.		5 (cont)		
LM End	1.40	Issue Type +	Ob	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
- Calogoly			Start		End			
Vegetation				38.6944	69°	38.694469°		
item				-121.634312 °		-121.634312°		
DWR ID	DWR_RD1	DWR_RD1600_01_f _ 2012_5						
		Comn	nent Cod	de				
V8 : Enviro	onmental F	Requirements.						
		Inspecto	or Comm	nent				



DWR revegetation site. Spring 2016.

LM Start	1.42	Rating **	A/W	Issue No.		52	
LM End	1.42	Issue Type +	Ма	Location *	Location *		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Slope Stability			38.6947	28°	38.694728 °		
item				-121.6342	24 °	-121.634224°	
DWR ID	DWR_RD1	600_01_f _ 201	8_52				

#### Comment Code

S3: Repair the levee slope damaged by vehicle traffic and prevent access where possible.

#### Inspector Comment

Ruts on the landside slope from vehicles. Recommend monitoring for future activity.

#### Photo 1 of 1: FA\_2019\_RD1600\_191\_52\_20190829\_00022.jpg



View of ruts on landside shoulder. Spring 2019.

	LM Start	1.65	Rating **	A/W	Issue No.	46		
	LM End	1.65	Issue Type +	Ma	Location *	LS		
	Category	Earthen L	evee	GPS Latitude/Longitude				
					Start		End	
	Item	Slope Sta	bility		38.6977	99°	38.697799	0
					-121.6323	96°	-121.632396	0
	DWR ID	DWR_RD1	600_01_f _ 201	9_46				

Comment Code

S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.

Inspector Comment

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## **Levee Inspection Report By Mile - Fall 2019**

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	1.70	Rating **	A/W	Issue No.		70	
LM End	1.70	Issue Type +	Ma	Location *		LS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory			Start		End		
Item	Slope Sta	Slope Stability			14°	38.698414°	
пеш			-121.6318	74°	-121.631874°		
DWR ID	DWR_RD1	600_01_f _ 201	7_70				
Comment Code							
S2 : Repai	S2 : Repair the levee slope damaged by foot traffic and prevent access						

where possible.

Inspector Comment

Footpath on landside slope. Recommend monitoring.





View of slope instability. Fall 2016.

LM Start	1.72	Rating **	A/W	Issue No.		31
LM End	1.72	Issue Type +	Ma	Location *		WS
Category Earthen Levee				GPS Latitude/Longitude		
Calegory			Start		End	
Item	Vegetatio	n		38.6986	39°	38.698639°
iteiii				-121.6316	87°	-121.631687°
DWR ID	DWR_RD1	600_01_s _ 201	2_31			·

Comment Code

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

LM Start	2.01	Rating **	A/W	Issue No.		72	
LM End	2.01	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Erosion /	Bank Caving		38.7016	05°	38.701605	0
item				-121.6279	54°	-121.627954	0
DWR ID	DWR_RD1	600_01_s _ 201	8_72				
		_					

Comment Code

E1: Note and monitor erosion site.

Inspector Comment

Runoff rills on landside slope.

# Photo 1 of 1: FA\_2019\_RD1600\_191\_72\_20190829\_00026.jpg



View of the erosion site. Spring 2017.

\* Location + Issue Type Ma : Maintenance Deficiency
Ob : Design & System Obsolescence LS: Land Side N : Not Inspected/Rated N/A: Not Applicable : Acceptable : Minimally Acceptable WS: Water Side C : Corrected A/W : Acceptable but Monitor & Maintain CR : Crown U : Unacceptable En: Enforcement

## Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	2.03	Rating **	С	Issue No.		62
LM End	2.03	Issue Type +	Ма	Location *	n* WS	
Category	Earthen L	evee		GPS La	titud	e/Longitude
Calegory				Start		End
Item	Animal Co	ontrol		38.70178	30°	38.701780°
пеш				-121.62764	48 °	-121.627648°
DWR ID	DWR_RD1	600_01_f _ 201	7_62			

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Multiple holes on the waterside slope. The LMA has done a good job of baiting the area.

Rating \*\* Issue No. 2.06 М 48 LM Start 2.06 Issue Type + Location \* LS LM End Ma Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 38.702099° 38.702099° Item -121.627177° -121.627177° DWR\_RD1600\_01\_f \_ 2019\_48 DWR ID

Comment Code

PR: Prunings

Inspector Comment

Pruning pile on the landside slope.

No Photos

No Photos

Rating \*\* Issue No. С LM Start 2.11 54 2.13 Issue Type + Ma Location \* LS LM End Earthen Levee GPS Latitude/Longitude Category Start End Vegetation 38.702491° 38.702645° Item -121.626463 ° -121.626227° DWR ID DWR\_RD1600\_01\_f \_ 2018\_54

Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

\* Location

N/A: Not Applicable

LS: Land Side WS: Water Side CR : Crown

A : Acceptable M : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiency Ob : Design & System Obsolescence

A/W : Acceptable but Monitor & Maintain En: Enforcement

## Levee Inspection Report By Mile - Fall 2019

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	2.15	Rating **	М	Issue No.		50
LM End	2.15	Issue Type +	Ма	Location *		LS
Catagory	Category Earthen Levee				titud	e/Longitude
Calegory				Start		End
Item	Encroach	ments		38.7028	79°	38.702879 °
пеш				-121.62583	35 °	-121.625835 °
DWR ID	DWR_RD1	600_01_f _ 201	9_50			
	Comment Code					

TR : Tree or limb

Inspector Comment

Fallen tree limb on the landside slope.

No Photos

LM Start	2.16	Rating **	M	Issue No.	53		
LM End	2.16	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS Lat	itud	le/Longitude	
Calegory	ategory		Start		End		
Item	Animal Co	ontrol		38.70293	o°	38.702930	0
пеш				-121.62576	3°	-121.625763	٥
DWR ID	DWR_RD1	600_01_f _ 201	9_53				
		0		1.			

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Rodent holes on the landside slope and crown.

No Photos

LM Start	2.19	Rating **	М	Issue No.		55	
LM End	2.19	Issue Type +	Ma	Location *		CR	
Category	Earthen L	evee		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		38.7032	05°	38.703205	c
item				-121.6253	68 °	-121.625368	c
DWR ID	DWR_RD1	600_01_f _ 201	9_55				
		Comn	nent Coc	łe			

TR : Tree or limb

Inspector Comment

Fallen tree limb on the crown.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected AW : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## **Levee Inspection Report By Mile - Fall 2019**

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	2.30	Rating **	U	Issue No.		56
LM End	2.30	Issue Type +	Ма	Location *	LS	
Category	Earthen L	evee		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	Animal Co	ontrol		38.70419	8 °	38.704198
пеш				-121.62372	5 °	-121.623725
DWR ID	DWR_RD1	600_01_f _ 201	9_56			

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Large rodent holes and mounds on the landside shoulder.

# Photo 1 of 1: FA\_2019\_RD1600\_191\_56\_20191112\_00058.jpg



View of the rodent holes on the landside shoulder. Fall 2019.

LM Start	2.31	Rating **	М	Issue No.		57
LM End	2.31	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee		GPS La	atitud	le/Longitude
Calegory						End
Item	Encroach	ments		38.7042	92°	38.704292 °
пеш				-121.6235	64°	-121.623564°
DWR ID	DWR_RD1	600_01_f _ 201	9_57			

Comment Code

TR: Tree or limb

Inspector Comment

Fallen tree limb on the waterside slope.

No Photos

LM Start	2.35	Rating **	A/W	Issue No.		35	
LM End	2.40	Issue Type +	Ob	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Vegetatio	n		38.7046	24°	38.705152	0
item				-121.6230	34°	-121.622187	0
DWR ID	DWR_RD1	600_01_s _ 201	2_35				
		Comn	nent Cod	de			
V8 : Enviro	onmental F	Requirements.					Т

Inspector Comment

**ON-SITE REVEGETATION** IN PROGRESS To enhance fish and wildlife habitat for conservation and mitigation purposes. Mowing, spraying, grazing and tree cutting is prohibited. Violators may be subject to penalty or prosecution. For more information on the Levee Repair Program go to: DEPARTMENT OF WATER RESOURCES 03/24/2016

Photo 1 of 2: FA\_2019\_RD1600\_191\_35\_20190829\_00014.jpg

Sign for revegetation site. Spring 2016.

\* Location + Issue Type Ma : Maintenance Deficiency LS: Land Side N/A: Not Applicable A : Acceptable M : Minimally Acceptable N : Not Inspected/Rated WS: Water Side C : Corrected Ob : Design & System Obsolescence A/W : Acceptable but Monitor & Maintain CR : Crown U : Unacceptable En: Enforcement

## Levee Inspection Report By Mile - Fall 2019

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	2.35	Rating **	A/W	Issue No.		35 (cont)	
LM End	2.40	Issue Type +	Ob	Location *		WS	
Category	Earthen L	evee		GPS La	atitude	e/Longitude	
Category				Start		End	
Item	Vegetatio	n		38.7046	24°	38.705152°	
item				-121.623034°		-121.622187°	
DWR ID	DWR_RD1	600_01_s _ 201	2_35				
		Comn	nent Cod	de			
V8 : Enviro	onmental F	Requirements.					
Inspector Comment							



View of the revegetation site on the waterward side of the levee looking upstream. Spring 2016.

LM Start	2.40	Rating **	М	Issue No.		43			
LM End	2.40	Issue Type +	Ма	Location *		LS			
Category	Earthen L	evee		GPS La	atitud	le/Longitude			
Category				Start		End			
Item	Erosion / I	Bank Caving		38.7051	54°	38.705154°			
item				-121.6222	31 °	-121.622231 °			
DWR ID	DWR ID DWR_RD1600_01_s _ 2019_43								
		Comn	nent Cod	de					
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spe	ction.			
	Inspector Comment								
Erosion on the landside slope.									



View of erosion cutting into crown road on the landside soulder.

LM Start	2.61	Rating **	A/W	Issue No.		45		
LM End	2.61	Issue Type +	Ма	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Outogory				Start		End		
Item	Vegetatio	n		38.7073	11°	38.707311 °		
item				-121.6195	17°	-121.619517°		
DWR ID	DWR ID DWR_RD1600_01_f _ 2016_45							
		Comn	nent Cod	le				
V4 : Elderk	perries are	blocking visib	ility and	flood fight	capa	bility.		
		Inspecto	or Comm	ent				

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## **Levee Inspection Report By Mile - Fall 2019**

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	2.73	Rating **	М	Issue No.		58			
LM End	2.73	Issue Type +	Ма	Location *		CR			
Category	Catagoria Earthen Levee			GPS La	atitud	e/Longitude			
Calegory				Start		End			
Item	Encroachi	ments		38.7085	40°	38.708540°			
пеш	item				20°	-121.617920°			
DWR ID	DWR_RD1	600_01_f _ 201	9_58						
		Comn	nent Cod	de					
TR : Tree of	or limb								
		Inspecto	or Comm	nent					
Fallen tree	Fallen tree limb on the crown.								

No Photos

Rating \*\* Issue No. LM Start 2.76 Μ 59 Location \* LM End 2.76 Issue Type + Ма CR Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 38.708795° 38.708795° Item -121.617586° -121.617586° DWR\_RD1600\_01\_f \_ 2019\_59 DWR ID **Comment Code** 

No Photos

TR: Tree or limb

Inspector Comment

Fallen tree limb on the crown.

CR : Crown

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

## Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	2.81	Rating **	М	Issue No.		1205
LM End	2.81	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DRAFT D	WR UCIP Fie	ld	38.70935	0°	38.709350 °
пеш	Study			-121.61691	3°	-121.616913°
DWR ID	21467					·

## Inspector Comment

Comment Code

DS\_ID:21467 FS\_ID:15108 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: Pipe removed and replaced with a pipe dsid 25565 -

permit 18852.

Appears abandoned and should be done so properly. Debris buildup on

pier. Power cut to pump.

FIELD STRUCT DESC: \*REMOVED\* 16-inch steel irrigation pipe through the levee, 2 feet below the crown. Walkway from berm to pump on pile structure in the stream. Siphon breaker on the landside (LS) slope. 12-inch polyvinyl chloride (PVC) standpipe off the LS toe. [Additional Reference(s): DWR Levee Log, 1988. USACE Sacramento O&M Manual 123, August 1955, (RM 73.4) (18-inch pipe listed)]. FS Date: 6/18/2013

2.81 Rating \*\* М Issue No. 1205 (cont) LM Start Location ' 2.81 Issue Type + En LM End





Pump on metal platform off WS berm.

Photo 2 of 3: UCIP\_FA\_2019\_15108\_24825.jpg



Debris buildup at metal platform waterline.

## Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	2.81	Rating **	М	Issue No.	1205 (cont)		
LM End	2.81	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item		WR UCIP Fie	ld	38.70935	0°	38.709350 °	5
пеш	Study			-121.61691	3°	-121.616913 °	5
DWR ID	21467						

## Inspector Comment

Comment Code

DS\_ID:21467 FS\_ID:15108 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: Pipe removed and replaced with a pipe dsid 25565 -

permit 18852.

Appears abandoned and should be done so properly. Debris buildup on

pier. Power cut to pump.

FIELD STRUCT DESC: \*REMOVED\* 16-inch steel irrigation pipe through the levee, 2 feet below the crown. Walkway from berm to pump on pile structure in the stream. Siphon breaker on the landside (LS) slope. 12-inch polyvinyl chloride (PVC) standpipe off the LS toe. [Additional Reference(s): DWR Levee Log, 1988. USACE Sacramento O&M Manual 123, August 1955, (RM 73.4) (18-inch pipe listed)].

FS Date: 6/18/2013



Electrical cut to pump.

	LM Start	2.84	Rating **	М	Issue No.	64		
	LM End	2.84	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude				
Category					Start		End	
	Item	Encroach	ments	38.70964	47°	38.709647°		
	пеш				-121.61653	37°	-121.616537 °	
	DWR ID	DWR_RD1	600_01_f _ 201	9_64				
	Comment Code							
	TR : Tree	or limb						

Inspector Comment

Fallen tree limb on the waterside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	2.93	Rating **	М	Issue No.	1206		
LM End	2.93	Issue Type +	En	Location *			
Category	Suppleme	GPS Latitude/Longitude					
Calegory			Start		End		
Item	DRAFT DWR UCIP Field			38.71049	7 °	38.710497°	
пеш	Study		-121.61538	1 °	-121.615381 °		
DWR ID	21490						
Comment Code							

#### Inspector Comment

DS\_ID:21490 FS\_ID:15110 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Abandoned and should be removed from levee. FIELD\_STRUCT\_DESC: \*ABANDONED\* 10-inch reinforced concrete pipe of an unknown purpose through the levee, 5 feet below the crown. Pipe visible on the landside (LS) slope. [Additional Reference(s): USACE Sacramento O&M Manual 123, August 1955, (RM 73.5)]. FS Date: 6/18/2013

 LM Start
 2.93
 Rating \*\*
 M
 Issue No.
 1206 (cont)

 LM End
 2.93
 Issue Type +
 En
 Location \*



Pipe visible on LS slope.

#### Photo 2 of 2: UCIP\_FA\_2019\_15110\_24827.jpg



Pipe visible on LS slope.

## **Levee Inspection Report By Mile - Fall 2019**

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	2.99	Rating **	М	Issue No.	15		
LM End	3.37	Issue Type +	Ма	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 USACE Erosion Survey			38.7108	74°	38.715134	0
пеш				-121.6142	39°	-121.609566	0
DWR ID	DWR_RD1600_01_f _ 2018_15						
Comment Code							

Inspector Comment

2017 Site ID: SAC 74.0 R Status: Eroding New

2017 Field Notes: Significant toe erosion. Erosion along entire bank.

Tree popouts observed.

Site History:

LM Start	3.01	Rating **	М	Issue No.		65			
LM End	3.01	Issue Type +	Ma	Location *	LS				
Category	Earthen L	GPS Latitude/Longitude							
Category				Start		End			
Item	Encroach	ncroachments			59°	38.711359°			
item				-121.6142	81 °	-121.614281 °			
DWR ID	DWR_RD1	600_01_f _ 201	9_65						
Comment Code									
TR · Tree	TR : Tree or limb								

R: Tree or limb

Inspector Comment

Large fallen tree branch on the landside slope.

Photo 1 of 1: FA\_2019\_RD1600\_191\_65\_20191112\_00059.jpg

No Photos



View of fallen tree on the landside slope. Fall 2019.

	LM Start	3.04	Rating **	A/W	Issue No.	37				
	LM End	3.04	Issue Type +	Ma	Location *	LS				
	Category	Earthen L	evee		GPS La	titud	e/Longitude			
					Start		End			
	Item	Vegetatio	n		38.7115	97°	38.711597	0		
					-121.6138	90°	-121.613890	0		
	DWR ID	DWR_RD1	600_01_s _ 201	2_37						
	Commant Code									

Comment Code

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

\* Location + Issue Type Ma : Maintenance Deficiency
Ob : Design & System Obsolescence LS: Land Side N : Not Inspected/Rated N/A: Not Applicable : Acceptable : Minimally Acceptable WS: Water Side C : Corrected A/W : Acceptable but Monitor & Maintain CR : Crown U : Unacceptable En: Enforcement

## Levee Inspection Report By Mile - Fall 2019

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	3.14	Rating **	М	Issue No.	67		
LM End	3.14	Issue Type +	Ма	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory			Start		End		
Item	Erosion / Bank Caving			38.712686°		38.712686 °	
пеш				-121.61265	54°	-121.612654°	
DWR ID	DWR_RD1	600_01_f _ 201	9_67				
Comment Code							
E2 : Sched	dule repair	of erosion site	e prior to	the next ins	spe	ction.	

Inspector Comment

Bank caving on the landside slope.

Issue No. Rating \*\* С 3.15 41 LM Start 3.52 Issue Type + Ма Location \* LS LM End Earthen Levee GPS Latitude/Longitude Category Start End Vegetation 38.712819° 38.717123° Item -121.612506 ° -121.608453 ° DWR\_RD1600\_01\_s \_ 2019\_41 DWR ID Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

No Photos

LM Start	3.20	Rating **	М	Issue No.	51		
LM End	3.20	Issue Type +	Ma	Location *	LS		
	Earthen L	evee	GPS Latitude/Longitude				
Category			Start		End		
Item	Vegetation			38.7133	93°	38.713393°	
item				-121.6118	28°	-121.611828°	
DWR ID	DWR_RD1600_01_s _ 2017_51						
Comment Code							

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

\* Location LS: Land Side

N/A: Not Applicable

WS: Water Side CR : Crown

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

Page 24 of 45

En: Enforcement

## Levee Inspection Report By Mile - Fall 2019

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	3.33	Rating **	М	Issue No.	68		
LM End	3.33	Issue Type +	Ма	Location *	LS		
Catagony	Category Earthen Levee					le/Longitude	
Calegory			Start		End		
Item	Vegetation			38.71486	61 °	38.714861°	
пеш			-121.61034	10°	-121.610340°		
DWR ID	DWR_RD1	600_01_f _ 201	9_68				
Comment Code							

V2 : Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

Remove blackberries on the landside slope.

Rating \*\* Issue No. LM Start 3.40 Μ 77 Location \* LM End 3.40 Issue Type + LS Earthen Levee GPS Latitude/Longitude Category Start End Vegetation 38.715681° 38.715681 ° Item -121.609555 ° -121.609555 ° DWR\_RD1600\_01\_f \_ 2019\_77 DWR ID Comment Code

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

No Photos

LM Start	3.55	Rating **	M	Issue No.		69			
LM End	3.55	Issue Type +	Ma	Location *		LS			
Category	Earthen L	GPS Latitude/Longitude							
Calegory				Start		End			
Item	Encroach	Encroachments			73°	38.717573	0		
				-121.6081	24°	-121.608124	0		
DWR ID	DWR_RD1	600_01_f _ 201							
Comment Code									

TR: Tree or limb

Inspector Comment

Fallen tree limb on the landside slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	3.58	Rating **	М	Issue No.		16	
LM End	3.83	Issue Type +	Ма	Location *		WS	
Category	Supplemental				GPS Latitude/Longitude		
Calegory				Start		End	
Item	2017 USA	CE Erosion S	Survey	38.71777	o°	38.721351	
пеш				-121.60742	:3°	-121.606414	
DWR ID	DWR_RD1	600_01_f _ 201	8_16				

#### Inspector Comment

Comment Code

2017 Site ID: SAC 74.4 R

Status: Eroding

2017 Field Notes: Significant erosion at toe in the past year. Fresh tree

popout.

Site History: 1997 - Steep high bank. 2005 - Some small pockets in the low toe near the waterline. 2006 - Minor slope clearing. 2010 - Minor new erosion. 2011 - Multiple trees have fallen since last year. Some other trees look ready to fall. Significant new erosion since last year. 2012 - Minor new erosion. 2013 - Minor new erosion. 2015 - Minor new toe erosion.

## Photo 1 of 1: FA\_2019\_RD1600\_191\_16\_20190829\_00004.jpg



USACE 2013 Photo #1

LM Start	4.34	Rating **	М	Issue No.		17		
LM End	4.86	Issue Type +	Ma	Location *	WS			
Category	ental	GPS Latitude/Longitude						
Calegory				Start		End		
Item	2017 USA	CE Erosion S	Survey	38.7286	84°	38.736110°		
пеш				-121.6058	44 °	-121.604153°		
DWR ID DWR_RD1600_01_f _ 2018_17								
	Comment Code							

#### Inspector Comment

2017 Site ID: SAC 75.3 R

Status: Eroding

2017 Field Notes: Fresh erosion along lower bank in sections. Site History: 1997 - Very steep bank. 2005 - Lots of small trees down along the bank at the upstream end. 2006 - Minor new erosion, but slow. 2010 - Almost all of the roots are exposed on the trees, appears ready to fall. 2011 - New erosion and tree popouts. 2012 - Site has become overgrown with vegetation, making it hard to observe. 2015 Dense vegetation made the site difficult to observe.

## Photo 1 of 1: FA\_2019\_RD1600\_191\_17\_20190829\_00005.jpg



USACE 2013 Photo #1

## Levee Inspection Report By Mile - Fall 2019

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	4.43	Rating **	M	Issue No.		71		
LM End	4.43	Issue Type +	Ма	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Encroach	ments		38.7300	48°	38.730048 °		
пеш				-121.606012 °		-121.606012 °		
DWR ID	DWR_RD1	600_01_f _ 201	9_71					
		Comn	nent Cod	de				
TR: Tree	or limb							
Inspector Comment								
Fallen tree	Fallen tree on the waterside slope.							

No Photos

LM Start	4.46	Rating **	М	Issue No.		60	
LM End	4.46	Issue Type +	Ma	Location *	WS		
Category	Earthen L	evee	GPS Latitude/Longitude				
Calegory				Start		End	
Item	Encroach	ments		38.73044	1°	38.730441	0
пеш				-121.60593	1 °	-121.605931	0
DWR ID	DWR_RD1	600_01_f _ 201	9_60				
		_					

Comment Code

TR: Tree or limb

Inspector Comment

Fallen tree on the waterside slope.

No Photos

LM Start	4.49	Rating **	М	Issue No.		73		
LM End	4.49	Issue Type +	Ma	Location *		LS		
	Category Earthen Levee				GPS Latitude/Longitude			
Calegory	ory			Start		End		
Item	Erosion /	Bank Caving		38.7309	06°	38.730906	٥	
Item				-121.6059	70°	-121.605970	٥	
DWR ID	DWR_RD1	600_01_f _ 201	9_73					
Item			9_73					

Comment Code

E2 : Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Bank caving on the landside slope caused by goats.

## Photo 1 of 1 : FA\_2019\_RD1600\_191\_73\_20191112\_00060.jpg



View of bank caving on the landside slope. Fall 2019.

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
M: Maintenance Deficiency
C: Corrected
M: Minimally Acceptable
C: Corrected
D: Unacceptable
A/W: Acceptable but Monitor & Maintain
En: Enforcement

## Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	4.51	Rating **	М	Issue No.		1207		
LM End	4.51	Issue Type +	En	Location *				
Category	ental	GPS Latitude/Longitude						
Category		Start		End				
Item		WR UCIP Fie	ld	38.73114	13 °	38.731143°		
пеш	Study			-121.60582	25 °	-121.605825°		
DWR ID	21470							
	Comment Code							

#### Inspector Comment

DS\_ID:21470 FS\_ID:15125 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pumphouse abandoned with deep pit open. Safety

issue. If plant is abandoned it should be done so properly.

FIELD\_STRUCT\_DESC: 24-inch steel irrigation pipe through the levee, 21.4 feet below the crown. 16-inch pipe ties into 24-inch pipe at the waterside (WS) slope. Slant pump on metal platform and gate valve on the WS berm. Gate valve in pump house off the landside (LS). Two power poles at the LS toe. [Additional Reference(s): DWR Levee Log, 1988. USACE Sacramento O&M Manual 123, August 1955, (RM 75.2) (20-inch pipe listed)].

FS Date: 6/18/2013 7:36:00 AM

LM Start	4.51	Rating **	М	Issue No.	1207 (cont)
LM End	4.51	Issue Type +	En	Location *	



Pumphouse/distribution box off LS toe.

#### Photo 2 of 3: UCIP\_FA\_2019\_15125\_24845.jpg



Slant pump on metal pier on WS berm.

## Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	4.51	Rating **	М	Issue No.	1	1207 (cont)
LM End	4.51	Issue Type +	En	Location *		
Supplemental			GPS Latitude/Longitude			
Calegory	Category			Start		End
Item		WR UCIP Fie	ld	38.73114	ı3°	38.731143°
пеш	Study	Study			25 °	-121.605825 °
DWR ID	21470					·

#### Inspector Comment

Comment Code

DS\_ID:21470 FS\_ID:15125 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pumphouse abandoned with deep pit open. Safety

issue. If plant is abandoned it should be done so properly.

FIELD\_STRUCT\_DESC: 24-inch steel irrigation pipe through the levee, 21.4 feet below the crown. 16-inch pipe ties into 24-inch pipe at the waterside (WS) slope. Slant pump on metal platform and gate valve on the WS berm. Gate valve in pump house off the landside (LS). Two power poles at the LS toe. [Additional Reference(s): DWR Levee Log, 1988. USACE Sacramento O&M Manual 123, August 1955, (RM 75.2) (20-inch pipe listed)].

FS Date: 6/18/2013 7:36:00 AM



16-inch pipe ties into 24-inch pipe under pump platform at slide gate.

LM Start	4.52	Rating **	М	Issue No.		1208	
LM End	4.52	Issue Type +	En	Location *			
Supplemental				GPS La	atitud	le/Longitude	
Calegory	Category					End	
Item		WR UCIP Fie	ld	38.7312	80°	38.731280°	
item	Study			-121.6058	25°	-121.605825°	
DWR ID 21471							
Comment Code							

#### Inspector Comment

DS\_ID:21471 FS\_ID:41563 EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe should be removed from slope.

FIELD STRUCT DESC: \*ABANDONED\* 12-inch pipe through the

levee 5.5 feet below the crown. Grouted in place 1957.

FS Date: 6/18/2013

Photo 1 of	2 : UCIP_	_FA_2019 <sub>-</sub>	_41563_274	474.Jpg



Pipe and remnants of grouted pipe on LS slope.

## Levee Inspection Report By Mile - Fall 2019

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	4.52	Rating **	М	Issue No.	1	1208 (cont)	
LM End	4.52	Issue Type +	En	Location *			_
Supplemental				GPS La	titud	le/Longitude	
Category				Start		End	
Item		WR UCIP Fie	ld	38.73128	30°	38.731280	0
пеш	Study			-121.60582	25 °	-121.605825	٥
DWR ID	21471						

#### Comment Code

#### Inspector Comment

DS\_ID:21471 FS\_ID:41563 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Pipe should be removed from slope.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 12-inch pipe through the

levee 5.5 feet below the crown. Grouted in place 1957.

FS Date: 6/18/2013

Photo 2 of 2 : UCIP_FA_2019_41563_27473.jpg
7. 人名比尔 美国 经
<b>《从丛》《墨歌》</b> 《文文》
文件下下 <del>次</del> 多数,使为10年的
<b>医</b> 从
楼 (人) (人) (人) (人)
<b>为一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个</b>
,00/18/2013.14:03

Pipe and remnants of grouted pipe on LS slope.

LM Start	4.72	Rating **	М	Issue No.		18			
LM End	4.72	Issue Type +	Ma	Location *	WS				
Category Earthen Levee			GPS Latitude/Longitude						
Calegory	Category			Start		End			
Item	Encroach	ments		38.73425	55°	38.734255 °			
item				-121.60519	90°	-121.605190 °			
DWR ID DWR_RD1600_01_s _ 2018_18									
	Comment Code								

TR : Tree or limb

#### Inspector Comment

Fallen tree on waterside slope.

## Levee Inspection Report By Mile - Fall 2019

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	4.75	Rating **	A/W	Issue No.		1193		
LM End	4.75	Issue Type +	Ma	Location *		LS		
Earthen Levee			GPS Latitude/Longitude					
Category	Category			Start		End		
Item	Vegetation			38.7345	61 °	38.734561 °		
item				-121.6051	13°	-121.605113 °		
DWR ID	DWR_RD1	600_01_s _ 201	5_1193					
Comment Code								
V4 : Elderberries are blocking visibility and flood fight capability.								

Inspector Comment

No Photos

Issue No. Rating \*\* A/W 1194 4.76 LM Start 4.76 Issue Type + Location \* LS LM End Earthen Levee GPS Latitude/Longitude Category Start End Vegetation 38.734784° 38.734784° Item -121.605048° -121.605048° DWR\_RD1600\_01\_s \_ 2015\_1194 DWR ID Comment Code

No Photos

V4 : Elderberries are blocking visibility and flood fight capability.

Inspector Comment

	LM Start	4.79	Rating **	A/W	Issue No.		1195			
	LM End	4.79	Issue Type +	Ma	Location *	WS				
	Category Earthen Levee		GPS La	atitud	le/Longitude					
			Start		End					
ltem Vegetation		n		38.7351	11°	38.735111	0			
	item				-121.6049	23°	-121.604923	0		
DWR ID DWR_RD1600_01_s _ 2015_1195										
	Comment Code									

No Photos

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

## **Levee Inspection Report By Mile - Fall 2019**

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	4.80	Rating **	A/W	Issue No.		1196		
LM End	4.80	Issue Type +	Ma	Location *		LS		
Earthen Levee			GPS La	atitud	le/Longitude			
Category				Start		End		
Item	Vegetatio	n	38.7352	75°	38.735275°			
пеш				-121.6048	63°	-121.604863 °		
DWR ID	DWR_RD1	600_01_f _ 201	9_1196					
		Comn	nent Cod	de				
V4 : Elderk	V4 : Elderberries are blocking visibility and flood fight capability.							
	Inspector Comment							

No Photos

LM Start	4.85	Rating **	A/W	Issue No.	1197		
LM End	4.85	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Vegetation			38.736095°		38.736095°		
item				-121.604642 °		-121.604642°	
DWR ID DWR_RD1600_01_s _ 2015_1197							
Comment Code							

No Photos

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

LM Start	4.87	Rating **	С	Issue No.	36		
LM End	4.87	Issue Type +	En	Location *	WS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Encroachments			38.736300°		38.736300°	
			-121.6045	76°	-121.604576 °		
DWR ID DWR_RD1600_01_s _ 2019_36							
		Comn	nent Cod	de			
DE : Debri	S						

No Photos

Inspector Comment Wooden planks on the waterside slope.

\* Location LS: Land Side N/A: Not Applicable WS: Water Side

CR : Crown

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2019

## **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	5.02	Rating **	М	Issue No.	74		
LM End	5.02	Issue Type +	Ma	Location *	LS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Item	Encroachments			38.738343 °		38.738343 °	
пеш				-121.603759°		-121.603759°	
DWR ID DWR_RD1600_01_f _ 2019_74							
Comment Code							
TR : Tree or limb							

Inspector Comment

Fallen tree limbs on the landside slope.

No Photos

Rating \*\* Issue No. 5.07 М 75 LM Start 5.07 Issue Type + Location \* CR LM End Ma Earthen Levee GPS Latitude/Longitude Category Start End Trim / Thin Trees 38.739057° 38.739057° Item -121.603508° -121.603508° DWR\_RD1600\_01\_f \_ 2019\_75 DWR ID Comment Code

No Photos

T4: Trim trees over roadway to at least 12 feet above ground level.

Inspector Comment

Rating \*\* Issue No. A/W LM Start 5.42 13 Location \* 5.42 Issue Type + Ma LS LM End Earthen Levee GPS Latitude/Longitude Category Start End Vegetation 38.743805° 38.743805° Item -121.601319° -121.601319° DWR ID DWR\_RD1600\_01\_s \_ 2012\_13 Comment Code

No Photos

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

\* Location N/A: Not Applicable LS: Land Side WS: Water Side

CR : Crown

A : Acceptable M : Minimally Acceptable U : Unacceptable

N: Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	5.44	Rating **	A/W	Issue No.	19					
LM End	5.77	Issue Type +	Ма	Location *	WS					
Catagony	Category Earthen Levee					GPS Latitude/Longitude				
Category				Start		End				
Item	Erosion /	Bank Caving		38.7441	18°	38.748210°				
пеш				-121.6011	04°	-121.598025 °				
DWR ID DWR_RD1600_01_s _ 2012_19										
	Comment Code									

E1 : Note and monitor erosion site.

Inspector Comment

Gradual loss of the berm over many years. Erosion is at the waters edge. Walnut trees are close to edge now. Recommend monitoring.

No Photos

No Photos

Issue No. Rating \*\* 5.80 М LM Start 39 5.80 Issue Type + Location \* WS LM End Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 38.748639° 38.748639° Item -121.597662° -121.597662° DWR\_RD1600\_01\_f \_ 2017\_39 DWR ID

Comment Code

DE: Debris

Inspector Comment

Abandoned pipes on waterside slope.

LM Start	5.85	Rating **	M	Issue No.		63		
LM End	5.85	Issue Type +	En	Location *		WS		
Category Earthen Levee			GPS Latitude/Longitude					
Calegory				Start		End		
Item	Encroachi	chments		38.7492	53°	38.749253	٥	
item				-121.5972	03°	-121.597203	٥	
DWR ID	DWR_RD1	600_01_f _ 201	8_63					
Comment Code								

DE : Debris

Inspector Comment

Abandoned pipes on the waterside bench.

No Photos

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	6.19	Rating **	М	Issue No.		1209
LM End	6.19	Issue Type +	En	Location *		
Category	Suppleme	Supplemental			titud	e/Longitude
Calegory						End
Item	DRAFT D	WR UCIP Fie	ld	38.75382	20°	38.753820°
пеш	Study		-121.5950°	2°	-121.595012°	
DWR ID	21476					·

### Inspector Comment

Comment Code

DS ID:21476 FS\_ID:53410 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 07/17/2018 No integrity issue observed, therefore crossing downgraded to "Non-Urgent". Needs proper abandonment or removal. Fall hazard: one of two standpipes on LS is broken to the ground level and uncovered which is a safety issue. (O.Yakimov-DWR UCIP)08/15/2016 - no change since previous inspection (T.

Hatch/UCIP)06/20/2013 - Pipe is abandoned and open on both ends.

It should be abandoned properly. (W. Wylie/UCIP)

FIELD\_STRUCT\_DESC: \*ABANDONED\* 18-inch steel irrigation pipe through the levee, 4.5 feet below the crown. Pump on pile structure on the waterside (WS), pump not found and only the piles remain. Walkway between levee crown and pile structure on the WS, not found. Overhead power line crosses the levee. Service pole on the WS slope. 6-foot by 6-foot concrete distribution box at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 1988. USACE Sacramento O&M Manual 123, August 1955, (RM 77.0)].

FS Date: 7/17/2018 7:56:22 AM

LM Start	6.19	Rating **	М	Issue No.	1209 (cont)
LM End	6.19	Issue Type +	En	Location *	



6'X6' concrete distribution box on LS toe.

Photo 2 of 3: UCIP\_FA\_2019\_53410\_25010.jpg



Pipe on WS slope.

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	6.19	Rating **	М	Issue No.	1	1209 (cont)
LM End	6.19	Issue Type +	En	Location *		
Category	Suppleme	ental		GPS Latitude/Longitu		
Calegory	Category		Start		End	
Item	DRAFT D	WR UCIP Fie	ld	38.75382	0 °	38.753820°
пеш	Study			-121.59501	2°	-121.595012°
DWR ID	21476					

#### Inspector Comment

Comment Code

DS\_ID:21476 FS\_ID:53410 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 07/17/2018 No integrity issue observed, therefore crossing downgraded to "Non-Urgent". Needs proper abandonment or removal. Fall hazard: one of two standpipes on LS is broken to the ground level and uncovered which is a safety issue. (O.Yakimov-DWR UCIP)08/15/2016 - no change since previous inspection (T. Hatch/UCIP)06/20/2013 - Pipe is abandoned and open on both ends.

It should be abandoned properly. (W. Wylie/UCIP)
FIELD\_STRUCT\_DESC: \*ABANDONED\* 18-inch steel irrigation pipe through the levee, 4.5 feet below the crown. Pump on pile structure on the waterside (WS), pump not found and only the piles remain. Walkway between levee crown and pile structure on the WS, not found. Overhead power line crosses the levee. Service pole on the WS slope. 6-foot by 6-foot concrete distribution box at the landside (LS) toe. [Additional Reference(s): DWR Levee Log, 1988. USACE Sacramento O&M Manual 123, August 1955, (RM 77.0)].

FS Date: 7/17/2018 7:56:22 AM



Pump missing from pier on WS toe.

LM Start	6.56	Rating **	М	Issue No.		80			
LM End	6.56	Issue Type +	Ma	Location *		LS			
Category Earthen Levee				GPS Latitude/Longitude					
Category				Start		End			
Item	Vegetation			38.7591	31 °	38.759131	0		
Item				-121.5940	92°	-121.594092	0		
DWR ID DWR_RD1600_01_s _ 2017_80									
Comment Code									

V4: Elderberries are blocking visibility and flood fight capability.

Inspector Comment

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2019

### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	6.76	Rating **	М	Issue No.		76	
LM End	6.76	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Encroach	ments		38.7619	80°	38.761980 °	
пеш				-121.594454 °		-121.594454°	
DWR ID	DWR_RD1	600_01_f _ 201	9_76				
		Comn	nent Cod	de			
TR : Tree	or limb						
Inspector Comment							
Fallen tree limb on the wateside shoulder.							

No Photos

LM Start	6.95	Rating **	М	Issue No.		23	
LM End	6.98	Issue Type +	e + Ma Location * W		WS		
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory				Start		End	
2017 USACE Erosion Survey				38.76480	)1 °	38.765219°	
item				-121.59492	26°	-121.595049°	
DWR ID	DWR_RD1	600_01_f _ 201	8_23				

#### Inspector Comment

Comment Code

2017 Site ID: SAC 77.7 R

Status: Eroding

2017 Field Notes: Minor new erosion.

Site History: 2006 - Eddy scour off end of rock causing erosion and scour hole near levee. Sandy silt bank with rock on upstream end. 2010 - Trees are leaning more, minor new erosion. 2011 - Many of the tree roots have scoured out and trees look ready to fall.

# Photo 1 of 1 : FA\_2019\_RD1600\_191\_23\_20190829\_00013.jpg



USACE 2013 Photo #1

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	7.10	Rating **	A/W	Issue No.	20				
LM End	7.10	Issue Type +	Ma	Location *	WS				
Category	Earthen L	evee		GPS La	atitud	le/Longitude			
Calegory				Start		End			
Erosion / Bank Caving				38.7666	91 °	38.766691 °			
item			-121.5963	00°	-121.596300°				
DWR ID	DWR_RD1	600_01_s _ 201	2_20						
		Comn	nent Cod	de					
E1: Note a	and monito	or erosion site							
Inspector Comment									
Continued erosion within the waterside berm. Not within the prism.									

 LM Start
 7.10
 Rating \*\*
 A/W
 Issue No.
 20 (cont)

 LM End
 7.10
 Issue Type +
 Ma
 Location \*
 WS



This another view of the site.

Photo 2 of 2: FA\_2019\_RD1600\_191\_20\_20190829\_00007.jpg



View of the erosion in the berm area on the waterward side looking upstream. Fall 2015.

Photo 1 of 1: FA\_2019\_RD1600\_191\_61\_20190829\_00023.jpg

LM Start	7.21	Rating **	A/W	Issue No.		61		
LM End	7.21	Issue Type +	Ма	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Erosion /	Bank Caving		38.7680	94°	38.768094°		
пеш	item				)75°	-121.597075°		
DWR ID	DWR_RD1	600_01_f _ 201	5_61					
		Comn	nent Cod	de				
E1 : Note a	and monito	or erosion site						
		Inspecto	or Comm	nent				
Runoff erosion on landside slope. Recommend monitoring.								



View of the erosion on the landward side of the levee looking downstream. Fall 2015.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	7.23	Rating **	A/W	Issue No.	21			
LM End	7.23	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Erosion / I	Bank Caving		38.7684	09°	38.768409°		
пеш				-121.597213°		-121.597213 °		
DWR ID	DWR ID DWR_RD1600_01_f _ 2019_21							
		Comn	nent Cod	de				
E1 : Note a	and monito	r erosion site						
		Inspecto	or Comm	nent				
Erosion on	Erosion on waterside berm. Not within the prism.							

LM Start	7.23	Rating **	A/W	Issue No.	21 (cont)
LM End	7.23	Issue Type +	Ма	Location *	WS



The erosion is eroding away the berm area.

Photo 2 of 3: FA\_2019\_RD1600\_191\_21\_20190829\_00009.jpg



The bank is eroding away and has become very steep.

LM Start	7.23	Rating **	A/W	Issue No.	21 (cont)
LM End	7.23	Issue Type +	Ma	Location *	WS



View of the erosion along the waterward berm of the levee. Fall 2015.

\* Location

LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown

\*\* Rating

A : Acceptable N : Not Inspected/Rated M : Maintenance Deficiency

C : Corrected Ob : Design & System Obsolescence

U : Unacceptable A/W : Acceptable but Monitor & Maintain

\*\* Rating

A : Acceptable M : Minimally Acceptable Ob : Design & System Obsolescence

En : Enforcement

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	7.38	Rating **	М	Issue No.		81		
LM End	7.38	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Vegetatio	n		38.7703	38°	38.770338 °		
пеш				-121.598542°		-121.598542°		
DWR ID	DWR_RD1	600_01_s _ 201	9_81					
		Comn	nent Cod	de				
V4 : Elderl	oerries are	blocking visib	ility and	flood fight	capa	bility.		
Inspector Comment								

No Photos

LM Start	7.56	Rating **	М	Issue No.		1210
LM End	7.56	Issue Type +	En	Location *		
Category	ental	GPS La	atitud	le/Longitude		
Calegory				Start		End
Item		WR UCIP Fie	ld	38.7725	60°	38.772560°
пеш	Study			-121.6001	53°	-121.600153 °
DWR ID	25464					

# Comment Code

#### Inspector Comment

DS\_ID:25464 FS\_ID:50169 EP\_NO: 18849

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/15/2016 - Pipe appears in good condition overall. Standing water found in riser for siphon breaker. Pump was not in

operation during field visit. (T. Hatch/UCIP)

FIELD\_STRUCT\_DESC: 24-inch welded steel irrigation pipe through the levee, 2 feet below the crown. Positive closure device in a steel riser with a lid on the waterside (WS) hinge of the levee. Siphon breaker in a steel riser with lid on the landside (LS) hinge of the levee. Distribution box on the LS toe. (Installed under Permit No. 18849, 2014 - Bypass Farms).

FS Date: 8/15/2016



view along the levee crown looking downstream. WS slope of the levee is visible.

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	7.56	Rating **	М	Issue No.	1210 (cont)		
LM End	7.56	Issue Type +	En	Location *			
Supplemental				GPS Latitude/Longitude			
Category	Category			Start		End	
Item	DRAFT D	WR UCIP Fie	ld	38.77256	60°	38.772560°	
пеш	Study		-121.60015	3°	-121.600153°		
DWR ID	25464						
Comment Code							

#### Inspector Comment

DS\_ID:25464 FS\_ID:50169 EP\_NO: 18849

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 08/15/2016 - Pipe appears in good condition overall. Standing water found in riser for siphon breaker. Pump was not in

operation during field visit. (T. Hatch/UCIP)

FIELD\_STRUCT\_DESC: 2\(\frac{2}{4}\)-inch welded steel irrigation pipe through the levee, 2 feet below the crown. Positive closure device in a steel riser with a lid on the waterside (WS) hinge of the levee. Siphon breaker in a steel riser with lid on the landside (LS) hinge of the levee. Distribution box on the LS toe. (Installed under Permit No. 18849, 2014 - Bypass Farms).

FS Date: 8/15/2016

LM Start	7.56	Rating **	М	Issue No.	1210 (cont)
LM End	7.56	Issue Type +	En	Location *	



view of positive closure device in metal riser on WS shoulder of levee.

Photo 3 of 3: UCIP\_FA\_2019\_50169\_75609.jpg



view of levee crown looking upstream from pipe location.

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	8.03	Rating **	М	Issue No.		Issue No.		1211
LM End	8.03	Issue Type +	En	Location *				
Supplemental				GPS Latitude/Longitude				
Calegory	Category					End		
Item	DRAFT D	38.7777	99°	38.777799°				
пеш	Study	-121.60570	33°	-121.605763°				
DWR ID	21480					·		

#### Inspector Comment

Comment Code

DS\_ID:21480 FS\_ID:16310 EP\_NO: 7339

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Need to determine disposition of pipe. If abandoned,

it should be done so properly.

FIELD\_STRUCT\_DESC: 24-inch steel irrigation pipe through the levee, 3.8 feet below the crown. Steel plate welded on the waterside (WS) end. Pipe not visible on either slope. Pilons in river at the WS toe, and a 4-foot-diameter steel standpipe on the landside (LS) toe. Seepage area at the landside (LS) toe. (Permit No. 7339, 1971 - Layton Knaggs).

[Additional Reference(s): DWR Levee Log, 1988].

FS Date: 6/20/2013



4-foot diameter steel standpipe at LS toe, may be indicator of pipe location.

LM Start	9.48	Rating **	U	Issue No.	1212	
LM End	9.48	Issue Type +	En	Location *		
Category	ental	GPS Latitude/Longitude				
Calegory			Start		End	
Item	DRAFT DWR UCIP Field				52°	38.777552°
item	Study		-121.627684°		-121.627684°	
DWR ID	21481					

#### Inspector Comment

Comment Code

DS\_ID:21481 FS\_ID:55622 EP\_NO: 1960 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 11/12/2019 A levee inspector reported to the Board excavating within 10-foot landside easement. (O.Yakimov - DWR UCIP) FIELD\_STRUCT\_DESC: 16-inch steel irrigation pipe through the levee, 3.6 feet below the crown. Slant pump on the waterside (WS) slope with a butterfly valve. Metal cutoff wall. 5-foot-diameter corrugated metal pipe (CMP) standpipe on the landside (LS) toe. Vent in 24-inch corrugated metal pipe (CMP) riser on the LS shoulder. 3.5-inch polyvinyl chloride (PVC) electrical conduit at the same location. (Permit No. 1960, 1954 - LDS Church). [Additional Reference(s): DWR Levee Log, 1988].

FS Date: 11/12/2019 3:21:53 PM



Photo 1 of 3: UCIP\_FA\_2019\_55622\_82178.jpg

Excavation near LS levee toe

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	9.48	Rating **	U	Issue No.	1212 (cont)		
LM End	9.48	Issue Type +	En	Location *			
Supplemental				GPS Latitude/Longitude			
Category	Category			Start		End	
Item	DRAFT D	WR UCIP Fie	ld	38.77755	2°	38.777552°	
пеш	Study	-121.62768	4 °	-121.627684°			
DWR ID	21481						
Comment Code							

#### Inspector Comment

DS\_ID:21481 FS\_ID:55622 EP\_NO: 1960 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 11/12/2019 A levee inspector reported to the Board excavating within 10-foot landside easement. (O.Yakimov - DWR UCIP) FIELD\_STRUCT\_DESC: 16-inch steel irrigation pipe through the levee, 3.6 feet below the crown. Slant pump on the waterside (WS) slope with a butterfly valve. Metal cutoff wall. 5-foot-diameter corrugated metal pipe (CMP) standpipe on the landside (LS) toe. Vent in 24-inch corrugated metal pipe (CMP) riser on the LS shoulder. 3.5-inch polyvinyl chloride (PVC) electrical conduit at the same location. (Permit No. 1960, 1954 - LDS Church). [Additional Reference(s): DWR Levee Log, 1988].

FS Date: 11/12/2019 3:21:53 PM

LM Start	9.48	Rating **	U	Issue No.	1212 (cont)
LM End	9.48	Issue Type +	En	Location *	



Excavation near LS levee toe

#### Photo 3 of 3: UCIP\_FA\_2019\_55622\_82180.jpg



Excavation near LS levee toe

#### **Levee Inspection Report By Mile - Fall 2019**

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	9.59	Rating **	М	Issue No.		25		
LM End	9.73	Issue Type +	Ma	Location *		WS		
Cotagon Earthen Levee			GPS La	titud	e/Longitude			
Category				Start		End		
ltom	Vegetatio	n		38.77648	85 °	38.775181 °		
Item S				-121.62909	95 °	-121.631070°		
DWR ID DWR_RD1600_01_s _ 2019_25								
Comment Code								

V2: Remove the wild growth other than native grasses from the levee

slopes. Inspector Comment No Photos

LM Start	9.85	Rating **	M	Issue No.		14	
LM End	10.01	Issue Type +	Ма	Location *		WS	
Earthen Levee				GPS Latitude/Longitude			
Category			Start		End		
Item	Vegetatio	n		38.7734	58°	38.771198°	
item			-121.6317	53°	-121.631637°		
DWR ID	DWR_RD1	600_01_s _ 201	9_14				

Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment

No Photos

LM Start	10.23	Rating **	М	Issue No.		66	
LM End	10.45	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Vegetatio	n		38.7681	60°	38.765406	0
item		-121.6329	50°	-121.635004	0		
DWR ID	DWR_RD1	600_01_f _ 201	6_66				

Comment Code

V2: Remove the wild growth other than native grasses from the levee slopes.

Inspector Comment



Vegetation on WS slope has been cleared only about 10 ft. from the crown. Fall 2016.

\* Location

LS: Land Side N/A: Not Applicable

WS: Water Side CR : Crown

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

A/W : Acceptable but Monitor & Maintain

Ma: Maintenance Deficiency Ob : Design & System Obsolescence

En: Enforcement

+ Issue Type

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Right	10.46	11/05/2019 11/05/2019	Zach Jojola

LM Start	10.38	Rating **	М	Issue No.		1202	
LM End	10.45	Issue Type +	En	Location *		WS	
Cotogony	Earthen L	evee		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	Encroachments			38.7663	863°	38.765402°	
пеш				-121.6343	817°	-121.635005 °	
DWR ID DWR_RD1600_01_s _ 2015_1202							
		Comn	nent Cod	de			
DE : Debri	s						
		Inspecto	or Comm	nent			
Concrete p	ipes and b	olocks on leve	e crown				

Photo 1 of 1 : FA\_2019\_RD1600\_191\_1202\_20190829\_00033.jpg



View of debris on the waterward side of the levee looking upstream. Spring 2015.

#### **Unit Cover Sheet**

Fall 2019 Levee Inspection Results

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles
Unit No. 02 Yolo Bypass	Left	4.23

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	3/5/2019 - 3/5/2019		11/5/2019 - 11/5/2019	
DWR Inspector	Zach Jojola		Zach Jojola	
Accompanied By	Alberto De Leon			

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

#### **Levee Inspection Report By Mile - Fall 2019**

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/05/2019 11/05/2019	Zach Jojola

		D-+i: **	A /\A/	Innua Na			
LM Start	0.92	Rating **	A/W	Issue No.		23	
LM End	1.40	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Odlogory			Start		End		
Item	Erosion / Bank Caving			38.7229	48 °	38.716108°	
item	-121.633477 °		77 °	-121.634930 °			
DWR ID DWR_RD1600_02_s _ 2017_23							
		Comn	nent Cod	de			
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spec	ction.	
		Inspecto	or Comm	nent			
Long section of wave wash damage on waterside levee slope.							

# Photo 1 of 1 : FA\_2019\_RD1600\_192\_23\_20190829\_00017.jpg



View of wave wash damage on waterside levee slope. Spring 2017.

LM Start	0.92	Rating **	М	Issue No.		16			
LM End	1.40	Issue Type +	Ма	Location *					
Category				GPS Latitude/Longitude					
Calegory				Start		End			
Item	2017 Stor	m Damage		38.7229	35 °	38.716072°			
пеш				-121.633456 °		-121.634937°			
DWR ID	RD 1600-0	3							
	Commant Codo								

#### Comment Code

#### Inspector Comment

Levee Evaluation Comments

Description: Site ID No:203

Site Designation:RD 1600-03

Repair Type: Erosion Rating:Area of Concern Field Date:6/5/2017

Notes: Site located inside bounds of 1600-01, same evaluation.

DWR Inspector Comment: Approximately 1' exposed scarp at worst

sections. Recommend repairing after flood season.

No Photos

	* Location	** Rating		+ Issue Type
ı	LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency
- 1	WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
- 1	CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En: Enforcement

#### **Levee Inspection Report By Mile - Fall 2019**

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/05/2019 11/05/2019	Zach Jojola

LM Start	1.56	Rating **	U	Issue No.		8		
LM End	1.62	Issue Type +	Ма	Location *		LS		
Cotogon Earthen Levee				GPS Latitude/Longitude				
Category				Start		End		
Item	Slope Sta	bility		38.713900°		38.713047°		
пеш				-121.6358	17°	-121.636154°		
DWR ID DWR_RD1600_02_s _ 2019_8								
	Comment Code							

S1: Repair slope instability.

#### Inspector Comment

300' sloughing section with multiple plateaus of exposed scarp. The LMA placed visqueen over the issue and will continue to monitor until a repair can be completed.

LM Start	1.56	Rating **	U	Issue No.	8 (cont)
LM End	1.62	Issue Type +	Ma	Location *	LS

#### Photo 1 of 3: FA\_2019\_RD1600\_192\_8\_20191112\_00024.jpg



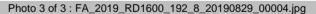
View of sloughing on the landside slope. Fall 2019.

#### Photo 2 of 3: FA\_2019\_RD1600\_192\_8\_20190829\_00003.jpg



View of sloughing on the landside slope. Spring 2019.

LM Start	1.56	Rating **	U	Issue No.	8 (cont)
LM End	1.62	Issue Type +	Ma	Location *	LS





Additional view of sloughing. Spring 2019.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/05/2019 11/05/2019	Zach Jojola

LM Start	1.79	Rating **	A/W	Issue No.		14
LM End	2.05	Issue Type +	Ма	Location *		WS
Category	Earthen Levee			GPS La	atitud	le/Longitude
Calegory				Start		End
Item	Erosion / I	Bank Caving		38.7107	63°	38.707116°
пеш				-121.637147°		-121.638722 °
DWR ID DWR_RD1600_02_s _ 2019_14						
		Comn	nent Cod	de		
E1 : Note a	and monito	or erosion site				
		Inspecto	or Comn	nent		

LM Start	1.79	Rating **	A/W	Issue No.	14 (cont)
LMEnd	2.05	Issue Type +	Ma	Location *	WS



A closer view of the wave wash damage along the bypass.

Photo 2 of 4: FA\_2019\_RD1600\_192\_14\_20190829\_00007.jpg



Wave wash damage along the slope the cut is 1'-2'.

LM Start	1.79	Rating **	A/W	Issue No.	14 (cont)
LM End	2.05	Issue Type +	Ma	Location *	WS



View of the erosion on the waterward side of the levee looking downstream. Fall 2015.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### **Levee Inspection Report By Mile - Fall 2019**

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/05/2019 11/05/2019	Zach Jojola

LM Start	1.79	Rating **	A/W	Issue No.		14 (cont)
LM End	2.05	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Erosion / Bank Caving			38.7107	'63 °	38.707116 °
пеш				-121.637147°		-121.638722°
DWR ID DWR_RD1600_02_s _ 2019_14						
		Comn	nent Cod	de		
E1 : Note a	and monito	r erosion site				
		Inspecto	or Comm	nent		



View of erosion site on WS slope. Fall 2016.

LM Start	1.79	Rating **	М	Issue No.	17		
LM End	2.27	Issue Type +	Ma	Location *			
Category				GPS Latitude/Longitude			
Calegory				Start		End	
Item	2017 Storm Damage			38.7107	63°	38.704121 °	
item				-121.6371	47°	-121.639992°	
DWR ID	RD 1600-0	1					
Comment Code							

#### Inspector Comment

Levee Evaluation Comments

Description: Site ID No:202

Site Designation:RD 1600-01 Repair Type: Erosion Rating:Area of Concern Field Date: 6/5/2017

Notes: Long streches of wavewash on the waterside slope.

#### Photo 1 of 3: LEVAL\_FA\_2019\_202\_1210.jpg



LS: Land Side WS: Water Side

CR : Crown

N/A: Not Applicable

: Acceptable : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence

En: Enforcement

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/05/2019 11/05/2019	Zach Jojola

LM Start	1.79	Rating **	М	Issue No.		17 (cont)			
LM End	2.27 Issue Type + Ma Location *								
Catagory	Category					GPS Latitude/Longitude			
Calegory		Start		End					
Item	2017 Stor	m Damage		38.7107	63 °	38.704121	0		
пеш			-121.6371	47°	-121.639992	0			
DWR ID RD 1600-01									
	Comment Code								

Inspector Comment

Levee Evaluation Comments

Description: Site ID No:202

Site Designation:RD 1600-01 Repair Type: Erosion Rating:Area of Concern Field Date:6/5/2017

Notes: Long streches of wavewash on the waterside slope.

LM Start	1.79	Rating **	М	Issue No.	17 (cont)
LM End	2.27	Issue Type +	Ma	Location *	



Photo 3 of 3: LEVAL\_FA\_2019\_202\_371.jpg



#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/05/2019 11/05/2019	Zach Jojola

LM Start	1.86	Rating ** M		Issue No.		4	
LM End	1.89	Issue Type +	Ма	Location *	CR		
Category	Earthen L	evee		GPS Latitude/Longitude			
Calegory				Start		End	
Item	Cracking	Cracking			64 °	38.709396°	
пеш				-121.63755	2°	-121.637716°	
DWR ID	DWR_RD1600_02_f _ 2019_4						

#### Comment Code

CR1: Monitor and have inspected by geotechnical engineer.

#### Inspector Comment

Large 200' longitudinal crack on the crown. Recommend having a geotechnical engineer conduct a site visit.

#### Photo 1 of 1: FA\_2019\_RD1600\_192\_4\_20191112\_00025.jpg



View of cracking on the crown. Fall 2019.

LM Start	2.16	Rating ** A/W		Issue No.		15
LM End	2.27	27 Issue Type + Ma		Location *		WS
Category	Earthen L	evee		GPS Latitude/Longitude		
Calegory				Start		End
Item	Erosion / I	Bank Caving		38.7056	14°	38.704052°
пеш				-121.6393	57°	-121.640016°
DWR ID	DWR_RD1	DWR_RD1600_02_s _ 2012_15				

#### Comment Code

E1: Note and monitor erosion site.

#### Inspector Comment

Previous erosion site. Recommend monitoring.

LM Start	2.16	Rating **	A/W	Issue No.	15 (cont)
LM End	2.27	Issue Type +	Ma	Location *	WS

#### Photo 1 of 3: FA\_2019\_RD1600\_192\_15\_20190829\_00010.jpg



Looking upstream a deeper cut of 2'-3' damage.

#### Photo 2 of 3: FA\_2019\_RD1600\_192\_15\_20190829\_00011.jpg



This is wave wash damage along the toe of the levee looking downstream.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/05/2019 11/05/2019	Zach Jojola

LM Start	2.16	Rating **	A/W	Issue No.		15 (cont)		
LM End	2.27	Issue Type +	Ma	Location *		WS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Calegory				Start		End		
Item	Erosion / I	Bank Caving		38.7056	14°	38.704052 °		
item				-121.639357°		7° -121.640016°		
DWR ID	DWR ID DWR_RD1600_02_s _ 2012_15							
		Comn	nent Cod	de				
E1 : Note a	and monito	r erosion site						
	Inspector Comment							
Previous erosion site. Recommend monitoring.								

Photo 3 of 3: FA\_2019\_RD1600\_192\_15\_20190829\_00012.jpg



View of wave wash damage on WS slope. Fall 2016.

LM Start	2.41	Rating **	С	Issue No.	20			
LM End	2.41	Issue Type +	Ma	Location *	WS			
Category Earthen Levee				GPS Latitude/Longitude				
Category			Start		End			
Item	Encroach	ments		38.7022	22 °	38.702222°		
пеш				-121.6407	91 °	-121.640791 °		
DWR ID	DWR_RD1	600_02_s _ 201	8_20					
	Comment Code							
DD D	DD Davidson							

PR: Prunings

Inspector Comment

Prunings on the waterside slope.

No Photos

LM Start	2.62	2.62 Rating ** C		Issue No.		19	
LM End	2.62	Issue Type +	Ma	Location *	LS		
Category	Earthen Levee				atituc	de/Longitude	
Category				Start		End	
Item	Encroach	Encroachments			60°	38.699360	c
itom				-121.6420	46°	-121.642046	c
DWR ID	DWR_RD1	8_19					
	Comment Code						
PR : Prunir	PR : Prunings						

Inspector Comment

Prunings on the landside slope.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/05/2019 11/05/2019	Zach Jojola

LM Start	2.77	Rating **	A/W	Issue No.	3		
LM End	2.77	Issue Type +	Ma	Location *		WS	
Category Earthen Levee			GPS La	atitud	e/Longitude		
Category				Start		End	
Item	Vegetatio	n	38.6972	66°	38.697266 °		
пеш			-121.642952 °		-121.642952 °		
DWR ID	DWR_RD1	600_02_s _ 201	6_3				
		Comn	nent Cod	de			
V4 : Elderb	perries are	blocking visib	ility and	flood fight	сара	ability.	
		Inspecto	or Comm	nent			

No Photos

LM Start	2.80	Rating **	С	Issue No.	18			
LM End	2.80	Issue Type +	Ma	Location *	LS			
Catagory	Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End		
Item	Encroachments			38.6968	37°	38.696837°		
пеш				-121.6431	32°	-121.643132°		
DWR ID	DWR_RD1	8_18						
Comment Code								

No Photos

PR: Prunings

Inspector Comment

Prunings on the landside slope.

LM Start	2.97	Rating **	С	Issue No.	30			
LM End	2.97	Issue Type +	Ma	Location *	LS			
Category	Earthen L	evee	GPS La	atitud	e/Longitude			
Category				Start		End		
Item	Encroach	ments		38.6944	78°	38.694478°		
item				-121.6441	16°	-121.644116 °		
DWR ID	DWR_RD1	600_02_f _ 201	7_30					
	Comment Code							
PR : Pruni	PR : Prunings							

Inspector Comment

No Photos

CR : Crown

Pruning pile on landside slope.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

#### **Levee Inspection Report By Mile - Fall 2019**

### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/05/2019 11/05/2019	Zach Jojola

LM Start	3.04	Rating **	С	Issue No.		13
LM End	3.04	Issue Type +	Ma	Location * LS		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory		Start		End		
ltom	Encroachments			38.6934	94°	38.693494°
пеш				-121.6445	39°	-121.644539°
DWR ID DWR_RD1600_02_s _ 2018_13						
		Comn	nent Cod	de		
PR : Pruni	ngs					
		Inspecto	or Comm	nent		
Pruning pil	e on the la	indside slope.				

No Photos

Rating \*\* Issue No. С 3.13 10 LM Start Location \* 3.13 Issue Type + Ма LS LM End Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 38.692324° 38.692324° Item -121.644964 ° -121.644964 ° DWR\_RD1600\_02\_s \_ 2018\_10 DWR ID Comment Code

No Photos

PR: Prunings

Inspector Comment

Prunings on the landside slope.

	LM Start	3.56	Rating **	С	Issue No.		7	
	LM End	3.56	Issue Type +	Ma	Location *	LS		
	Category	Earthen L	evee	GPS Latitude/Longitude				
	Category				Start		End	
	Item	Encroachi	ncroachments			86°	38.686068	0
					-121.64479	90°	-121.644790	0
	DWR ID	DWR_RD1	600_02_s _ 201	9_7				
	Comment Code							
	DD · Drunii	nae						

No Photos

PR : Prunings

CR : Crown

Inspector Comment

Pruning pile on the landside slope near shoulder.

\* Location LS: Land Side WS: Water Side

N/A: Not Applicable

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiency
Ob : Design & System Obsolescence En: Enforcement

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/05/2019 11/05/2019	Zach Jojola

LM Start	3.71	Rating **	М	Issue No.	31		
LM End	3.71	Issue Type +	En	Location *			
Catagony	Category Supplemental				GPS Latitude/Longitude		
Calegory			Start		End		
Item	DRAFT DWR UCIP Field			38.68397	'1 °	38.683971°	
пеш	Study		-121.64452	22°	-121.644522°		
DWR ID	21501						
	Comment Code						

#### Inspector Comment

DS\_ID:21501 FS\_ID:52738 EP\_NO: 10944

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 07/17/2018 Gas line markers are not installed. Unable to determine exact location of pipe. Crossing has been downgraged to "Non-Urgent" due to reclassification of gas lines. (O.Yakimov-DWR UCIP)08/16/2016 - unable to locate pipe. Need to install gas line markers on LS and WS of levee crown to denote location. (T. Hatch/UCIP)06/21/2013 - Need to install gasline markers on levee. (W. Wylie/UCIP)

FIELD\_STRUCT\_DESC: 8.625-inch steel gas line through the levee, 2 feet below the crown. (Permit No. 10944, 1975 - Shell Oil Company).

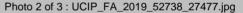
[Additional Reference(s): DWR Levee Log, 1988].

FS Date: 7/17/2018 3:18:28 PM

LM Start	3.71	Rating **	М	Issue No.	31 (cont)
I M End	3.71	Issue Type +	En	Location *	



PG&E marker flag on Crown.





Carsonite gasline marker visible approximately 1,000-feet east of levee crown.

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/05/2019 11/05/2019	Zach Jojola

LM Start	3.71	Rating **	М	Issue No.		31 (cont)	
LM End	3.71	Issue Type +	En	Location *			
Category	Suppleme	ental		GPS La	tituc	le/Longitude	
Calegory				Start		End	
Item		WR UCIP Fie	ld	38.6839	71 °	38.683971	0
item	Study	tudy			22 °	-121.644522	٥
DWR ID	21501						

#### Comment Code

#### Inspector Comment

DS\_ID:21501 FS\_ID:52738 EP\_NO: 10944

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: 07/17/2018 Gas line markers are not installed. Unable to determine exact location of pipe. Crossing has been downgraged to "Non-Urgent" due to reclassification of gas lines. (O.Yakimov-DWR UCIP)08/16/2016 - unable to locate pipe. Need to install gas line markers on LS and WS of levee crown to denote location. (T. Hatch/UCIP)06/21/2013 - Need to install gasline markers on levee. (W. Wylie/UCIP)

FIELD\_STRUCT\_DESC: 8.625-inch steel gas line through the levee, 2 feet below the crown. (Permit No. 10944, 1975 - Shell Oil Company). [Additional Reference(s): DWR Levee Log, 1988].

FS Date: 7/17/2018 3:18:28 PM



View of levee crown at potential crossing looking upstream.

LM Start	3.73	Rating **	С	Issue No.		12	
LM End	3.73	Issue Type +	Ma	Location *		LS	
Category	Earthen Levee			GPS La	atitud	e/Longitude	
Calegory		Start		End			
Item	Encroachments			38.683589°		38.683589	
пеш				-121.644513 °		-121.644513	0
DWR ID	DWR_RD1	600_02_s _ 201	8_12				
		Comn	nent Coo	le			
PR : Pruni	ngs						
		Inspecto	or Comm	ent			
Prunings on the landside shoulder.							

No Photos

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/05/2019 11/05/2019	Zach Jojola

LM Start	3.78	Rating **	M	Issue No.		5		
LM End	3.78	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude		
Category			Start		End			
Item	Slope Sta	Slope Stability			47°	38.682947°		
item				-121.6444	25°	-121.644425°		
DWR ID	DWR_RD1	600_02_f _ 201	8_5					
		Comn	nent Cod	de				
S3 : Repai access wh		slope damag le.	ed by ve	ehicle traffic	and	l prevent		
	Inspector Comment							
Tire ruts or	n the lands	side slope.						

No Photos

Rating \*\* Issue No. С LM Start 3.86 26 Location \* 3.86 Issue Type + Ма LS LM End Earthen Levee GPS Latitude/Longitude Category Start End Encroachments 38.681752° 38.681752° Item -121.644287 ° -121.644287° DWR\_RD1600\_02\_f \_ 2017\_26 DWR ID Comment Code PR: Prunings

Inspector Comment

No Photos

\* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

CR: Crown

Prunings on landside slope.

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/05/2019 11/05/2019	Zach Jojola

LM Start	4.17	Rating **	A/W	Issue No.		32	
LM End	4.17	Issue Type +	Ма	Location *			
Category Supplemental			GPS La	titud	le/Longitude		
				Start		End	
Item	DRAFT D	WR UCIP LM	A	38.67728	36°	38.677286°	
пеш	Responsil	oility		-121.64368	33°	-121.643683 °	
DWR ID	21502						
Comment Code							

Inspector Comment

DS\_ID:21502 FS\_ID:15303 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments:

FIELD\_STRUCT\_DESC: 72-inch by 72-inch reinforced concrete box drainage culvert through the levee, 26 feet below the crown. Slide gate on the waterside (WS) slope in a 9-foot by 10-foot concrete box. Culvert passes under the bypass canal, the railroad, and County Road 22 and terminates in the canal on the southwest side of the County Road 22 bridge. [Additional Reference(s): DWR Levee Log, 1988. USACE Sacramento O&M Manual 123, August 1955, (Station 155+00)].

FS Date: 6/21/2013

LM Start	4.17	Rating **	A/W	Issue No.	32 (cont)
LM End	4.17	Issue Type +	Ma	Location *	



Concrete intake structure on LS.

Photo 2 of 3: UCIP\_FA\_2019\_15303\_25157.jpg



Concrete intake structure on LS.

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/05/2019 11/05/2019	Zach Jojola

LM Start	4.17	Rating **	A/W	Issue No.		32 (cont)	
LM End	4.17	Issue Type +	Ма	Location *			
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item		WR UCIP LM	A	38.67728	6°	38.677286°	
Responsibility		-121.64368	3°	-121.643683 °			
DWR ID	21502						

## Inspector Comment

Comment Code

DS\_ID:21502 FS\_ID:15303 EP\_NO: N/A

Repair Type: No Action Needed Crossing Status: Found UCIP Comments:

FIELD\_STRUCT\_DESC: 72-inch by 72-inch reinforced concrete box drainage culvert through the levee, 26 feet below the crown. Slide gate on the waterside (WS) slope in a 9-foot by 10-foot concrete box. Culvert passes under the bypass canal, the railroad, and County Road 22 and terminates in the canal on the southwest side of the County Road 22 bridge. [Additional Reference(s): DWR Levee Log, 1988. USACE Sacramento O&M Manual 123, August 1955, (Station 155+00)].

FS Date: 6/21/2013



Slide gate in 9'X10' concrete box on WS slope.

LM Start	4.19	Rating **	M	Issue No.		6	
LM End	4.19	Issue Type +	Ma	Location *		LS	
Earthen Levee				GPS Latitude/Longitude			
Category			Start		End		
Item	Encroachments			38.67712	21 °	38.677121 °	
item				-121.64346	66°	-121.643466 °	
DWR ID	DWR_RD1	600_02_s _ 201	6_6				

TR: Tree or limb

Inspector Comment

Comment Code

Remove wood debris from landside slope.

#### Photo 1 of 2: FA\_2019\_RD1600\_192\_6\_20190829\_00001.jpg



View of the trees on the landward side of the levee looking downstream. Spring 2016.

#### Levee Inspection Report By Mile - Fall 2019

#### **Reclamation District No. 1600 Mull**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Yolo Bypass	Left	4.23	11/05/2019 11/05/2019	Zach Jojola

LM Start	4.19	Rating **	М	Issue No.		6 (cont)	
LM End	4.19	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroachi	ments		38.6771	21 °	38.677121 °	
пеш				-121.6434	-121.643466 °		
DWR ID DWR_RD1600_02_s _ 2016_6							
		Comn	nent Cod	de			
TR : Tree	or limb						
Inspector Comment							
Remove wood debris from landside slope.							

Photo 2 of 2 : FA\_2019\_RD1600\_192\_6\_20190829\_00002.jpg

View of debris on LS slope. Fall 2016.